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KEY RING HOLDER

FIELD OF THE INVENTION

5 The present invention is directed to a key ring holder, and more particularly to a device attachable to a belt or garment which facilitates connecting of various devices, including a key chain.

10 BACKGROUND OF THE INVENTION

Various key holders and retainers are known in the art, including those described in U.S. Patent Nos. 4,072,033 to Eckerdt; 3,979,934 to Isenmann; 3,906,763 to Bochory; 3,771,341 to Laufer; and 4,004,325 to Hubachek. None of such prior art devices, however, provide a device capable of providing permanent attachment to a garment or a belt, or a variety of other items, and that is further constructed of materials and is of such a design that it facilitates easy access and secure attachment of a key ring or a key chain. There is therefore a long felt but unsolved need for an inexpensive, easy to manufacture device capable of being secured to any number of items, but in particular a garment or a belt, to facilitate the easy, reversible attachment and detachment of a key ring, a key chain or any number of similar items.

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SUMMARY OF THE INVENTION

The present invention is directed to a unique, simple and secure key ring holder capable of being installed on a variety of items, including but not limited to clothing, belts, handbags, back packs and luggage. In a preferred embodiment, the key ring holder of the

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present invention is constructed from a solid and durable material, such as metal or hardened plastic. A preferred design of the present invention includes an extended post connected to a shoulder, the post having at least one aperture running therethrough for attaching various other hardware, including clips, snap hooks, quick links, shackles, rings etc. The shoulder is preferably securely mounted to an article to which attachment is desired. In one embodiment, the shoulder is securely fastened to a garment, such as jeans, pants, or overalls, thus facilitating easy access to such device for a person wearing such a garment. In other embodiments, the device of the present invention can be reversibly attached to a garment, such as through a button hole or other suitable aperture, thus allowing a user to use the present invention with a variety of articles rather than having it securely attached to just one article. The aperture running through the post is preferably of a size to provide for attachment of a variety of connecting apparatuses including but not limited to rings, snap hooks, shackles, etc.

In other embodiments, more than one aperture is provided in the post to facilitate more than one attaching device passing through said post. Thus, a variety of different key ring attachment means can be reversibly connected by using more than one of such apertures.

In still further embodiments, the post itself has a design to facilitate the reversible secure engagement of a connecting member. For example, the post can have an aperture running transversely therethrough which is large enough to extend completely through one wall of the post creating an open side of the post which is closed off by a reversibly and pivotally connected lever member. The preferably spring loaded lever is maintained in a closed position during normal use such that any connecting article must force the pivoting member to move so that the interior of the post aperture can be accessed. The pivoting

CB member can then move back to its normal, closed position, thus securing the connecting article inside the now closed aperture of the post.

Particular embodiments of the present invention are directed to garments having at least one of the key ring holders of the present invention affixed thereto. Still other  
5 embodiments are directed to belts, preferably made of either plastic, leather or other suitable durable material having at least one of the key ring holders of the present invention attached thereto.

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A1 Securement of the apparatus of the present invention to a garment or belt can be achieved in various different ways as will be appreciated by one of skill in the art.  
10 Preferably, however, the shoulder of the device can be attached directly to the garment or belt by a suitable adhesive and/or apertures can be provided in the shoulder for securing the shoulder to a garment or belt with rivets, thread, etc. A still further embodiment involves a rivet connection made possible by the shoulder being of a sufficient diameter such that it will not pass through a aperture in a grommet but which permits the post of the present invention  
15 to pass therethrough. To secure the post in such a grommet hole, various means can be employed. For example, the post may be maintained in a desired extended position, facilitating access to the at least one aperture in said post, simply due to the contact with a person's body or undergarment pressing outward against the shoulder. Alternatively, the device can be more firmly attached inside a grommet hole through the use of an exterior  
20 washer that fits over the post once the post has extended through the grommet hole. Thus, the shoulder is of sufficient circumference and diameter so that it cannot pass through a grommet hole, but wherein the post may extend through the hole, whereby a washer is placed over the post to secure it in place. One will appreciate that the washer placed over the post

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may be of different configurations, colors, etc. and is primarily intended as a cosmetic component. The washer may not require a fixation to the post and/or fabric adjacent thereto and can simply be maintained in its position on the post due to the fact that an attaching ring or article through the post aperture will prevent the washer from falling off. The washer can,  
5 however, also be affixed to the grommet structure and/or the belt, fabric, etc. of the article to which the grommet is attached. Various adhesives, riveting structures, threaded connections, etc., are also possible in order to achieve securement of the present invention to a desired article.

10 In use, a person threads a connecting device, such as a snap hook or a circular, overlapping wire ring, through the at least one aperture provided in the post. Once attached, the connecting device will simply hang from the post, thus facilitating the carrying of key chains, key rings, and various other desired hardware.

15 The size, diameter and circumference of the aperture provided in the post can obviously vary depending upon the particular use intended. Preferably, the aperture is at least about 1 centimeter in diameter, more preferably at least about 1/8th of an inch, and most preferably over about 1/4 of an inch. The size of the aperture can be varied to accommodate the attachment of various hardware, such as the girth of snap hooks or rings that may be used in conjunction with the present invention.

20 The length of the post can similarly be varied depending upon the particular uses to which the present invention is directed. The preferred length of the post is at least about 1 cm, more preferably at least about 1/4 inch and most preferably at least about 1/2 inch. The length should not, however exceed about one inch unless more than one aperture is provided

C3 therethrough. For example, if more than one aperture is provided in the post, the post can be of a longer length than if merely one aperture were afforded therein. Indeed, in one embodiment, several apertures are provided in a post to facilitate the attachment of more than one connecting means. Thus, different numbers and sizes of apertures may also be provided  
5 in a post to facilitate particular uses.

The aperture through the post is preferably perpendicular to the length of the post, but can, in various embodiments, be in any angular orientation through the transverse section of the post. In a preferred embodiment, the aperture is a double counter sunk hole (see Figure 1) so as to facilitate the easy attachment and detachment of a connecting means. Moreover,  
10 the shape of the hole can be of any desired geometry, but is preferably round. Thus, octangular, triangular, square and other shaped holes are within the scope of the present invention.

The extent of the shoulder diameter (in a circular shoulder embodiment) can be of any size sufficient to anchor the present invention in an article to which it is attached. Preferably,  
15 the diameter of the shoulder is slightly less than the length of the post. As one of skill will appreciate, the particular geometrical configuration of the shoulder can vary, but in a preferred embodiment, it is circular in shape. Other geometries that are preferred lack sharp edges which could negatively affect articles to which the present invention is attached given that the weight of any connecting means on the post will create pivotal torsion on the edges  
20 of the shoulder against the garment, belt, or other article to which the present invention is attached, thus causing undesired abrasion.

5 In some embodiments, reinforcement of a garment or other article to which the present invention is attached may be necessary in order to insure proper and long term attachment of the shoulder to the garment, belt or other article. For example, with respect to a garment, a suitable additional patch material may be provided that provides additional tensile strength to the garment fabric surrounding and attaching to the shoulder region of the present invention.

10 Still a further embodiment of the present invention is directed to an embodiment where the shoulder has a transverse aperture provided therein to facilitate slipping the shoulder over an existing button of a garment, such as a metal button common on denim jeans. By slipping the present device over an existing button 30, easy attachment of the present device is made possible without the need to provide a separate hole in the jeans or other articles and without the need to provide adhesives, separate rivets, etc.

15 In a preferred embodiment, the post and the shoulder are fixedly attached to each other, and indeed, in a most preferred embodiment, they are made integral with one another. Other embodiments, however include a threaded connection between the post and shoulder (Fig. 9), a ball and socket connection (Fig. 8), a snap-lock connection (not shown) etc. Again, while the present invention can be comprised of plastic or metal, in a preferred embodiment, the present invention is made from a metal material, such as brass, steel, nickle etc. or other metal alloys.

20 Although in a preferred embodiment the post is connected to the shoulder at a 90° angle, other angular orientations are well within the scope of the present invention. Indeed, Fig. 7, shows one embodiment of the present invention where the post is angled downwardly

to limit the degree of extension of the post away from a belt or garment to which it is attached.

Other features and embodiments will be revealed to those of skill in the art from a review of the detailed description of preferred embodiments and the figures described and  
5 featured herein.

### BRIEF DESCRIPTION OF THE FIGURES

Fig. 1 is a side view of the present invention showing one view of the aperture running through the post;

10 Fig. 2 is a side view of the present invention turned 90° from that shown in Fig. 1;

Fig. 3 is a top view of the present invention showing the smaller diameter of the post as compared to the larger diameter of the surrounding shoulder;

Fig. 4 is an alternative embodiment of the present invention wherein the shoulder facilitates slipping over a button existing on a garment;

15 Fig. 5 illustrates another embodiment to the present invention where the shoulder and aperture through the post are of a distinct geometrical configuration;

Fig. 6 illustrates another embodiment of the present invention having more than one aperture through the post;

20 Fig. 7 illustrates one embodiment of the present invention where the post is angularly connected to the shoulder;

Fig. 8 shows a ball and socket connection between the shoulder and the post;

Fig. 9 shows a threaded connection between the post and the shoulder;

Fig. 10 shows one embodiment of the present invention wherein a washer is fit over the post for securement purposes; and

Fig. 11 shows the present invention as it is used on jeans with a key ring/chain.

#### DETAILED DESCRIPTION OF THE INVENTION

Referring to Figs. 1-11, the present key ring holder invention 20 comprises a shoulder 22 connected to a post 24, such post having at least aperture 26 running transversely therethrough. In a preferred embodiment, the aperture 26 is a double counter sunk hole as shown in Fig. 1. The diameter of the shoulder 22 is preferably less than the length of the post 24 but can be of any particular size in order to facilitate secure attachment of the key ring holder to a desired article, such as a garment, belt, purse, etc.

Fig. 6, shows one embodiment of the present invention having more than one aperture 26 provided through the post 24. Fig. 7 shows the aperture 26 being provided at a slanted angle through the post 24.

Fig. 9, shows one embodiment where the post 24 is threadedly engageable with the shoulder 22, thus facilitating removal of the post 24 from the shoulder 22.

Fig. 10, shows one embodiment wherein the post 24 has a washer 28 which fits over the post once Fig. 11, shows the present invention as it may be used on jeans with a key ring/chain. The post 24 is fed through a hole in a garment, belt, etc.

While various embodiments of the present invention have been described in detail, it is apparent that further modifications and adaptations of the invention will occur to those



Figure 1 shows a schematic representation of the 12 genes and their organization in the 120 kb genomic region. The genes are arranged in a grid, with their names and orientations indicated by arrows. The genes are: *gms1*, *gms2*, *gms3*, *gms4*, *gms5*, *gms6*, *gms7*, *gms8*, *gms9*, *gms10*, *gms11*, and *gms12*. The orientations are indicated by arrows pointing right or left. The genes are organized into three groups: *gms1* to *gms6*, *gms7* to *gms10*, and *gms11* to *gms12*.